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Developing Integrated Object-Oriented Conception of Geomarketing as a Tool for Promotion of Regional Sustainable Development: The Case Study of Ukraine

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Abstract: In the paper we propose and discuss new vision of geomarketing as a tool for promotion of regional sustainable development. Integrated object-oriented conception of geomarketing was designed by adoption and elaboration of some new ideas and approaches, such as “place marketing”, “non-profit marketing”, “counter-marketing”, “collaborative spatial decision-making”, “endogenous regional development”, “regional sustainable development”, “public-private partnership”. We explore how geomarketing in such a comprehension may be implemented in business and public administration, regional development policy making on example of some Ukrainian firms, regional governments, and communities. The proposed geomarketing conception is based on integration of three different interpretations of geomarketing: 1) as a traditional marketing tool providing procedures of ‘geosegmentation’ and ‘geopositioning’ in market analysis; 2) as a marketing of places (placemarketing); 3) as a marketing of geographic knowledge and technologies helping to promote sustainable regional development. Such a complex approach foresees systematical empirical study of innovations and changes in these domains with the purpose to develop a general theory of geomarketing as a tool for promotion of sustainable development at local and regional levels.

Key Words: geomarketing, place marketing, regional sustainable development, endogenous regional development, public-private partnership, collaborative spatial decision-making.
1. Emerging of a new geomarketing conception

Until recently the concept of ‘geomarketing’ had a rather narrow meaning as a special tool in traditional (business) marketing aimed at geographic segmentation (‘geosegmentation’) of the marketplace and geographic positioning (‘geopositioning’) of the products (goods and services) [9, 11, 25, 44, 46]. In the middle of nineties the conception of ‘place marketing’ (P.Kotler, D.Haider, and I.Rein, 1994) was developed as a reaction on considerable changes in firm strategies and government policies caused by processes of globalization and regionalization (these two processes are synergetic and interdependent). That was a principal moment for geomarketing because it was placed in context of local and regional development [35-36]. Such an expansion of geomarketing concept has changed its perception by business community, local governments and non-governmental organizations.

1.1. What does traditional geomarketing can do?

- Can help firms determine which products and promotions match the lifestyles and buying patterns of their customers in geographic perspective
- Delimitate of the trade catchment areas, identify of retail sites, to make spatial competitor analysis
- By using GIS create a multidimensional snapshot of trends to plan trade areas, predict sales spatially, design sales territories, plan media and advertising geographically

1.2. The typical geomarketing questions

- Where are my customers located? What are their characteristics (market segmentation, classification of residential areas)?
- Where are my competitors located?
- What is the potential turnover in a region for my product? What market share can I expect?
- Where should I locate my new branch? Should I expand an existing branch?
- How should I promote my product? Where and how should I advertise (direct mailing)?

1.3. New dimensions of geomarketing in business management

The business communities also are changing their perception of geomarketing and view it more and more through a prism of sustainable development. The far sighting firms while conducting the marketing don’t limit it to the simple ‘geosegmentation’ and ‘geopositioning’, but try to take into account all peculiarities of geographic environment of the place, including its regional development perspectives, economic-geographical location, and environmental awareness of population. Another innovation in this sector is emerging of a new kind of business – production and distribution of geoinformation technologies (GIS-technologies). It may be viewed as a third dimension of geomarketing – marketing of geographical knowledge and technologies.
There are some new dimensions of geomarketing in business management.

1.3.1. Geomarketing and firm’s inner environment

- Extension of geomarketing conception by applying it to the analysis, planning and management of firm’s inner environment, i.e. spatial organization of firm’s productive forces (localization of manufacturing centers or branches)
- This approach opposes to the traditional geomarketing with its accent on analysis, planning and management of product’s exchange environment (spatial retail and competitor analysis, geosegmentation of marketplace and geopositioning of products, spatial product’s life-cycle analysis, etc.)
- This approach requires analysis and adoption of different spatial multiplicators in firm’s spatial behavior (spatial organization of firm’s productive forces).

1.3.2. Taking into consideration the types of geographical rent

- Differential geographical (regional) rent I: caused by differences in economic conditions for business in different regions
- Differential geographical (regional) rent II: caused by consistent investments in economy of the selected region. It reflects concentration of the capital (investments) in one region instead of its distribution among many
- Absolute geographical (regional) rent: caused by absolute limitation of the geoeconomic space (number of regions for investments is limited). Therefore investors are forced to remain the part of their capitals in the “bad” regions. Profits obtained in “good” regions compensate these losses.

1.3.3. Additional functions of geomarketing in business management

- Searching, defining and assessment of all possible spatial multiplicators of/for business location to include them in spatial decision process
- Defining and quantitative assessment of different types of geographical (regional) rent for business location decisions

1.4. Geomarketing as counter-marketing

The individuals and social groups (customers) try to respond manufacturers and suppliers making their own counter-geomarketing in order to solve shopping problems.

1.4.1. The customers’ response: counter-geomarketing

- The goal: optimization of spatial behavior of individuals and social groups (by different life-styles)
- The benefits: time, money and health savings
- The reason: increase of competitiveness at the markets of goods and services

1.4.2. The forms and methods of counter-geomarketing

- Planning of real estate buying
• Planning of shopping trips
• Planning of recreational trips
• Methods: electronic maps, mobile Internet, GPS, pocket PCs, mobile phones

1.5. Geomarketing and public administration

Local governments begin to view geomarketing (marketing of regions and localities) as a tool for promotion of local and regional economic development in conditions of increasing geo-economic competition (regional competition) [49]. Such marketing is aimed at attraction of investors’ interest to these territories with the purpose to make them ‘the gateways to the global economy’ [18]. On the other hand, the fact is that new approaches to regional development and policy seek to encourage enterprise and build entrepreneurial capacity in the regions as a means to boost national growth on principles of sustainability. In the emergent ‘bottom-up’ approaches to regional development and policy, localities and regions – whether relatively prosperous or laggard – are increasingly being encouraged to help themselves and become entrepreneurial agents of their own growth and development. The background to this more recent thinking lies in the emphasis upon endogenous (grown from within) forms of economic growth aimed at sustainable development. All these foresee inventory, assessment and marketing of local endogenous resources and factors of economic growth with sustainable perspective. In this case geomarketing helps to promote selected sites and places within the region as perspective ‘regional poles of economic growth’ keeping in mind their sustainability functions.

1.5.1. Marketing of places

• The key idea: how to attract investments, industries, residents and visitors to cities, communities, regions and nations
• The main goal: to arrange and sustain ecologically compatible socioeconomic development at local, regional and national levels
• The methodological tool: conception of sustainable development.

1.5.2. Geomarketing in local governments: the backgrounds

• New conditions of societal development cause step-by-step transfer of the methods and technologies of business management to public administration and self-governance
• Emerging of the conception of “business government” which is based on using of the achievements of corporative business management in public administration
• Only local governments as juridical owners of places (cities, communities, regions) can arrange sustainable development using legal, economic and political levers, including geomarketing.

1.5.3. The features of geomarketing in local governments

• It is non-profit. Instead notion of “profit” it operates rather with notion of “appropriateness”
• It is corporative. It represents interests of all parties and players of local economy (city, community, region)
• It is object-oriented. It is aimed at sustainable development as a long-term goal.

1.6. Academe and NGO

1.6.1. Geomarketing in academic sphere
• Agents of geomarketing: schools, colleges, universities, research institutions
• Products: geographic knowledge and technology, geographic curricula, geographic research agendas and programs, GIS software, graduates of geography departments
• The marketing goal: dissemination of geographic knowledge and technologies among business community, governments and public.

1.6.2. Benefits of academic geomarketing
• Economic profits: investments in geographic research and education, more freshmen at geography departments
• Non-economic profits: dissemination of geographic awareness among business community, governments and public cultivating sustainable vision and decision making.

1.6.3. Geomarketing in non-governmental organizations
Non-governmental organizations find geomarketing as an effective tool first of all for promotion of regional sustainable development and natural environment protection (natural resources and biodiversity preservation). By using of geomarketing (which has in this case non-commercial and non-profit nature), NGOs try to promote selected territories and localities as the whole natural ecosystems, which need saving and protection at national or international levels.

1.7. Geomarketing as a tool for promotion of regional sustainable development

The next step is in combining of these approaches and conceptions in order to establish public-private partnership as a form of synergy between firm strategies, government policies and NGO activities aimed at promotion of local and regional sustainable development.

Making regional development research projects in Ukraine, we were convinced of importance of such broad conception of geomarketing for application in public, private, and community sectors in conditions of transforming economy. So, we propose new complex geomarketing conception, which have to be designed by adoption and elaboration of some new ideas and approaches, such as “place marketing”, “collaborative spatial decision-making”, “endogenous regional development”, and “sustainable development”.

The proposed complex geomarketing conception is based on integration of three different interpretations of geomarketing: 1) as a traditional marketing tool providing procedures of ‘geosegmentation’ and ‘geopositioning’ in market analysis; 2) as a marketing of places
(placemarketing) at local and regional levels; 3) as a marketing of geographic knowledge and technologies. Such a complex approach foresees systematical empirical study of innovations and changes in these domains with the purpose to develop a general theory of geomarketing as a tool for promotion of sustainable development at local and regional levels.

It is “object-oriented” because it aimed at promotion of local and regional sustainable development.

Finally, the practical issue is to explore how geomarketing in such a comprehensive mode may be implemented in business administration and sustainable development policy making on example of some Ukrainian firms, local governments, and communities.

2. Placing geomarketing in context of regional development policy:
   the case study of Ukraine

Elaboration of new complex geomarketing conception (based on unification of three different conception) allows placing geomarketing in context of regional development policy and arranging synergy and partnership between firm strategies and government policies in promotion of local and regional sustainable development.

Significance of such geomarketing conception for transforming economy of Ukraine is grounded on the following arguments:

1. The young and developing business community in Ukraine have very few information about geomarketing as a special tool in market analysis and business planning. Therefore project may contribute significantly to cultivation of geomarketing awareness among Ukrainian businessmen (first conception of geomarketing). It will help in developing business culture and accelerating transformation processes in economy of Ukraine.

2. It is very important to implement geomarketing (as a placemarketing) in regional development policy in Ukraine. The point is that now Ukrainian local governments have much more power in regional planning and management. But because of lack of financial resources they can’t to realize designed plans on socioeconomic development of their territories. In this situation geomarketing may be used as an accelerator of local economic development. It is so called ‘bottom-up’ approach to regional development and policy, when localities and regions are increasingly being encouraged to help themselves and become entrepreneurial agents of their own growth and development. In this case geomarketing plays a key role providing inventory, assessment and marketing of local endogenous resources and factors of sustainable development.

3. It is necessary to disseminate among Ukrainian business community and local governments the ideology of public-private partnership based on geomarketing and collaborative spatial decision-making. Such approach will help to tie business activity and local development at the earliest phase of process and contribute to sustainable development.

Strategically implementation of geomarketing has to be conducted as a sequence of the following stages: a) empirical study of the existing experience and success stories; b) elaboration of the body of knowledge about geomarketing as a local sustainable development tool; c) arranging of the public-private partnership pilot-project on geomarketing (in collaboration with selected Ukrainian local governments); d) dissemination of the experience among business community, local governments and non-governmental organizations in Ukraine.

I. The empirical study of existing experience and success stories.

At this stage it is necessary to study systematically the existing experience in conducting of geomarketing by firms, local governments and NGOs in developed countries and aimed at the
local and regional sustainable development. The empirical study has to be conducted in four main directions:

1. Study the success stories of commercial geomarketing conducted by firms and affected the local and regional sustainable development. Special attention has to be paid to such issues as industrial location [8, 55], retail site selection [7, 40, 46], office location [12, 14, 26], defining and estimating the trading areas [25], tourism geomarketing [31]. Arranging a study of the firms producing and marketing the geographic information technologies (geomarketing as a marketing of geographic knowledge and technologies).

2. Inventory the geomarketing (placemarketing) experience of local governments at regional and local (municipal) levels. Special attention has to be paid to the role of geomarketing in rural community restructuring [32], small town business growth [33], facilities location [42], and historic and heritage tourism [31].

3. Inventory and study the geomarketing experience of the western non-government organizations promoting natural environment protection and regional sustainable development.

4. Study of the geomarketing role in arranging of public-private partnership for promotion of local and regional sustainable development.

There are some interesting success stories in the US Northwest:

- Wallace, Idaho – a mining community here with an active geomarketing program based on the historic mining heritage (over 100 years).
- Kellogg, Idaho – another mining town where over 2000 jobs were lost when the mine and smelter closed in early 1980s. The geomarketing program here was built on promotion of heritage and resort activities.
- Leavenworth, Washington – a former sawmill town that adopted a Bavarian theme and converted the place into an alpine German style village. It attracts over a million tourists a year to festivals at various times of year. In this case geomarketing was incorporated with other economic development programs in the region.

**II. Elaboration of the body of knowledge about geomarketing as a tool promoting local and regional sustainable development.**

At this stage the results of empirical researches have to be systemized and compared with the results of analogues researches made in Ukraine (for example, EU Danube Space Study and TACIS Lower Danube Lakes projects we have being engaged in). Then a general theory of geomarketing as a tool promoting local and regional sustainable development may be designed and discussed with the competent westerns experts. This theory will be based on unification of three different conception of geomarketing: 1) geomarketing as a traditional marketing tool providing procedures of ‘geosegmentation’ and ‘geopositioning’ in market analysis; 2) geomarketing as a marketing of places and localities (placemarketing); 3) geomarketing as a marketing of geographic knowledge and technologies. Special attention has to be paid to the development of so called Collaborative Spatial Decision-Making and corresponding geoinformation technologies to include them in geomarketing methodical apparatus [28-30].

**III. Arranging of the public-private partnership pilot-project on geomarketing in Ukraine.**

In order to test and verify the developed theory, a special pilot-project has to be arranged to establish the public-private partnership on the base of unified conception of geomarketing. It will be aimed at local sustainable development of the selected Ukrainian community. The purpose of such pilot-project is to elaborate the mechanisms of harmonization firms’ strategies, government policy and public interests in process of local sustainable development policy making.
IV. Dissemination of the experience among business community, local governments and non-governmental organizations in Ukraine.

This stage foresees dissemination of geomarketing know-how (as a tool for promotion of sustainable development) among academicians, business community, local governments, and public in Ukraine. Special attention has to be paid to the conditions and problems of geomarketing implementation under conditions of economic and administrative reforms are going on in Ukraine.

2.1. Geomarketing and local sustainable development: the case study of Odessa region

At the Laboratory of Regional Studies and GIS of Odessa I.I.Mechnikov National University we have developed and initiated some pilot-projects on geomarketing at local (municipal) level. The following sites and localities were selected as the case studies:

Odessa City – administrative center of Odessa region (oblast).

There is the rich architectural-historical environment and cultural heritage exist, which have to be incorporated into municipal economic development plan. Authorities have adopted recently special program on preservation of Odessa City’s historic center and use its heritage to attract tourists. Geomarketing is aimed here on harmonization of city’s industrial, recreational, and social functions.

Belgorod-Dnestrovsky rayon of Odessa oblast and town of Belgorod-Dnestrovsky.

It is very interesting in sense of historic heritage site in Odessa region. Remains of ancient Greek town of Tiras as well as medieval Turkish fortress are situated here. Not far from town of Belgorod-Dnestrovsky there are some very popular sea resorts: Sergeevka, Karolino-Bugaz, Zatoka. For these resorts special program on development of tourism and recreation was designed at regional level few years ago. Also this area has great potential for development of ecological or “green” tourism in Lower Dniester wetlands with their unique biodiversity and landscapes. The problem is that local government (Rayon State Administration) tries to develop a kind of complex program on socioeconomic development of the rayon and town, which should incorporate all mentioned priorities and opportunities.

Izmailsky rayon of Odessa oblast and town of Izmail.

Izmail is a medium size town on Lower Danube featuring with its famous historic monuments and sites related to Russian-Turkish war 1787-1891 (storm of Izmail fortress by Russian troops in 1790). Now Izmail (especially its port and ship repairing factory) suffers economically from decline of cargo and passenger navigation on the Lower Danube. Therefore development of cultural and historical tourism in this area may be considered as a key factor of local economic restoration and sustainable development.

Kiliisky rayon of Odessa oblast and village of Vilkovo.

It is Lower Danube Delta area with the large biodiversity preservation zone that is very attractive for tourists. Special “free economic tourist-recreational zone of Ukrainian Danube wetlands” has to be established here in the near future. Village of Vilkovo situated on the arm of Lower Danube and is called “Ukrainian Venice” because it was built “on the water” – there are a lot of canals and small Danube River’s arms dividing the village on blocks as in Italian Venice. Not far from Vilkovo there is nice sea resort Primorskoe with beautiful sand beaches. The lack of tourism infrastructure hinders the local economic development here.

Reniisky rayon of Odessa oblast and seaport of Reni.
The seaport of Reni was the largest one on Lower Danube in soviet times. Now it is in "economic shade" because of navigation decline on Ukrainian arm of Lower Danube caused by war in Yugoslavia and (that is more important) putting into operation the navigable canal Chorna Voda – Constantza in Romania. In order to revive local economy, the special economic zone has been established here few years ago. But it doesn’t improve the situation. As an alternative scenario, the ecological and cultural tourism would be proposed (e.g. there are many sites suitable for arranging of sport fishing and hunting).

Bolgradsky rayon of Odessa oblast and town of Bolgrad.
This rayon compactly populated by Bulgarians and Gagauzians and is famous for national festivals at various times of year. Local authorities try to develop cultural tourism here and incorporate it into plans of socioeconomic development of the communities.

Town of Ochakov, Nikolaev oblast.
This is well known historic site – first Russian settlement on the Black Sea, which was conquered by Russian troops during Russian-Turkish war 1787-1891. There are very interesting A.V.Suvorov historic museum (Commander-in-Chief of Russian troops during the war) and beautiful climatic resort.

2.2. The ongoing project: Center for geomarketing and promotion of sustainable business in Odessa region

2.2.1. Reasons of founding:
• Sensitive and valuable natural environment in the region: there are many valuable ecosystems and natural complexes located in Odessa region (wetlands, liman-estuarial ecosystems, Danube delta), which manifest great biodiversity and demand preservation and wise use.
• High level of business activity in Odessa region and its attractiveness for investors: Odessa region participates in a number of international economic programs and projects; there is developed business community already exist and local government actively supports small and medium business.
• Large experience on conducting of environmental projects in Odessa region: a number of sound international environmental projects have been initiated and conducted in Odessa region (Integrated Coastal Zone Management Project, World Bank; Lower Danube Lakes Project, TACIS; WWF projects etc.).
• Developed net of universities and research institutions having environmental research agenda: there are many universities and research institutions exist in Odessa region, which participate in environmental projects and have corresponding research agenda.

2.2.2. Center’s research and activity agenda:
• To explore natural, economic, social and legal potentials for introducing and developing of sustainable business in the region.
• Assistance in arranging of Public-Private Partnership in local authorities and state administrations in the region.
• Participation in elaboration of **regional regulatory policy** for small and medium business based on sustainability conception.
• Elaboration and dissemination of **GIS-based geomarketing technologies** for promotion of sustainable business in Odessa region.
• Arranging and sustaining of Summer School on **sustainable business and geomarketing** for businessmen and local authorities in the region.
• **Dissemination of experience** via regional, national and international conferences and Internet.

Educational track of this initiative consists of some new course designed for teaching in Odessa National University and Odessa Institute of Public Administration: “Business geography”, “Geomarketing”, “Geomanagement”, “Collaborative spatial decision-making in regional planning”. On the base of Laboratory of regional studies and GIS we plan to arrange special training seminar and summer school for local governments (oblast and rayon state administrations) on geomarketing and collaborative spatial decision-making as the tools for promotion of local and regional sustainable development.
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Economic goals:
- Efficiency
- Growth
- Stability

Social goals:
- Poverty
- Life quality
- Culture

Environmental goals:
- Biodiversity
- Natural Resources
- Pollution

Geospace: places localities regions

Figure 1. The role of geographical space in sustainable development
Figure 2. The role of geomarketing in arranging of Public-Private Partnership for regional sustainable development
Examples and Experience: The case of Ukraine
A. Regional Center for Geomarketing and Promotion of Sustainable Business (Odessa, Ukraine)
1. Reasons of founding:

- **Sensitive and valuable natural environment in the region**: there are many valuable ecosystems and natural complexes located in Odessa region (wetlands, liman-estuarial ecosystems, Danube delta), which manifest great biodiversity and demand preservation and wise use;

- **High level of business activity in Odessa region and its attractiveness for investors**: Odessa region participates in a number of international economic programs and projects; there is developed business community already exist and local government actively supports small and medium business;

- **Large experience on conducting of environmental projects in Odessa region**: a number of sound international environmental projects have been initiated and conducted in Odessa region (Integrated Coastal Zone Management Project, World Bank; Lower Danube Lakes Project, TACIS; WWF projects etc.);

- **Developed net of universities and research institutions having environmental research agenda**: there are many universities and research institutions exist in Odessa region, which participate in environmental projects and have corresponding research agenda.
2. Center’s research and activity agenda:

- To explore *natural, economic, social and legal potentials* for introducing and developing of sustainable business in the region;

- Assistance in arranging of *Public-Private Partnership* in local authorities and state administrations in the region;

- Participation in elaboration of *regional regulatory policy* for small and medium business based on sustainability conception;

- Elaboration and dissemination of *GIS-based geomarketing technologies* for promotion of sustainable business in Odessa region;

- Arranging and sustaining of *Summer School on sustainable business and geomarketing* for businessmen and local authorities in the region;

- *Dissemination of experience* via regional, national and international conferences and Internet.
Regional Center for Geomarketing and Promotion of Sustainable Business (Odessa, Ukraine)

Organizational structure and responsibilities:

- Regional Center for Geomarketing and Promotion of Sustainable Business

  Laboratory of Regional Studies and GIS, Odessa I.I. Mechnikov National University
  - Regional geoecological studies for promotion of sustainable business
  - Methods and technologies of geomarketing for business (geomarketing I)
  - Methods and technologies of geomarketing for local authorities (geomarketing II)
  - Dissemination of GIS-based geomarketing technologies (geomarketing III)
  - Summer School on GIS-technologies for businessmen and local authorities

  Odessa Institute of Market Problems and Economic-Ecological Studies
  - Elaboration of economic mechanisms for promotion of sustainable business
  - Assistance in arranging of Public-Private Partnership for promotion of sustainable business
  - Economic-ecological assessment and expertise of sustainable enterprises
  - Ecomanagement, ecoaudit, and ecoconsulting for promotion of sustainable business

  Odessa Institute of Public Administration
  - Defining of local authorities in the region for arranging of Public-Private Partnership pilot-projects
  - Summer School on sustainable development for local authorities
  - Programs on sustainable development for local authorities
  - Theory and practice of Public-Private Partnership for promotion of sustainable business

  Odessa Regional State Administration
  - Support and management of Public-Private Partnership pilot-projects arranged in local authorities and state administrations of Odessa region
  - Elaboration and implementation of regulatory policy for promotion of sustainable business
  - Programs for support of small and medium business
  - International cooperation for promotion of sustainable business in Odessa region
3. Geomarketing and local sustainable development in Odessa region: the on-going projects

3.1. Odessa City – administrative center of Odessa region (oblast)

- There is the rich architectural-historical environment and cultural heritage exist, which have to be incorporated into municipal economic development plan.

- Authorities have adopted recently special program on preservation of Odessa City’s historic center and use its heritage to attract tourists. Geomarketing is aimed here on harmonization of city’s industrial, recreational, and social functions.

- Program of sustainable development of Odessa City till 2015 has been approved by local authorities
3.2. Belgorod-Dnestrovsky rayon and town of Belgorod-Dnestrovsky

- It is very interesting in sense of historic heritage site in Odessa region. Remains of ancient Greek town of Tiras as well as medieval Turkish fortress are situated here.

- Not far from town of Belgorod-Dnestrovsky there are some very popular sea resorts: Sergeevka, Karolino-Bugaz, Zatoka. For these resorts special program on development of tourism and recreation was designed at regional level few years ago.

- Also this area has great potential for development of ecological or “green” tourism in Lower Dniester wetlands with their unique biodiversity and landscapes.

- Local government (Rayon State Administration) tries to develop a kind of complex program on socioeconomic development of the rayon and town, which should incorporate all mentioned priorities and opportunities.
3.3. Izmailsky rayon and town of Izmail

- Izmail is a medium size town on Lower Danube featuring with its famous historic monuments and sites related to Russian-Turkish war 1787-1891 (storm of Izmail fortress by Russian troops in 1790).
- Now Izmail (especially its port and ship repairing factory) suffers economically from decline of cargo and passenger navigation on the Lower Danube.
- Therefore development of cultural and historical tourism in this area may be considered as a key factor of local economic restoration and sustainable development.
3.4. Kiliisky rayon and village of Vilkovo

- It is Lower Danube Delta area with the large biodiversity preservation zone that is very attractive for tourists.
- Special “free economic tourist-recreational zone of Ukrainian Danube wetlands” has to be established here in the near future.
- Village of Vilkovo situated on the arm of Lower Danube and is called “Ukrainian Venice” because it was built “on the water” – there are a lot of canals and small Danube River’s arms dividing the village on blocks as in Italian Venice.
- Not far from Vilkovo there is nice sea resort Primorskoe with beautiful sand beaches. The lack of tourism infrastructure hinders the local economic development here.
3.5. Reniisky rayon and seaport of Reni

- The seaport of Reni was the largest one on Lower Danube in soviet times.
- Now it is in “economic shade” because of navigation decline on Ukrainian arm of Lower Danube caused by war in Yugoslavia and (that is more important) putting into operation the navigable canal Chorna Voda – Constantza in Romania.
- In order to revive local economy, the special economic zone has been established here few years ago. But it doesn’t improve the situation.
- As an alternative scenario, the ecological and cultural tourism would be proposed (e.g. there are many sites suitable for arranging of sport fishing and hunting).
3.6. Bolgradsky rayon of Odessa oblast and town of Bolgrad

- This rayon compactly populated by Bulgarians and Gagauzians and is famous for national festivals at various times of year.
- Local authorities try to develop cultural tourism here and incorporate it into plans of socioeconomic development of the communities.
3.7. Town of Ochakov, Nikolaev oblast

- This is well known historic site – first Russian settlement on the Black Sea, which was conquered by Russian troops during Russian-Turkish war 1787-1891.

- There are very interesting A.V. Suvorov historic museum (Commander-in-Chief of Russian troops during the war) and beautiful climatic resort.

- Local authorities have designed and launched special program of socio-economic development of the rayon and town.
B. Promotion of sustainable business in zones of ecological risk at the Ukrainian Black&Azov seacoast

Zones of ecological risk defined for coastal region of Ukraine:

1. Odessa oblast:
   1.1. Lake of Kugurlui
   1.2. Lake of Kartal
   1.3. Kiliyski arm of Danube Delta
   1.4. Lake of Sasyk
   1.5. Lakes system of Shagany-Alibeiburnas
   1.6. Dniestr-Turunchuk wetland area
   1.7. Northern coast of Dniestr Liman
   1.8. Western coast of Tiligulsky Liman

2. Nikolaev oblast:
   2.1. Eastern coast of Tiligulsky Liman

3. Kherson oblast:
   3.1. Lower Dniepr
   3.2. Tendrovski Bay
   3.3. Yagorlytski Bay
   3.4. Karkinitski Bay
   3.5. Dzharylgach Bay
   3.6. Eastern part of Sivash Lagoon

4. Autonomous Republic of Crimea:
   4.1. Central part of Sivash Lagoon

5. Zaporozhie oblast:
   5.1. Molochni Liman
   5.2. Obitochnaya Peninsula and Obitochni Bay
   5.3. Lower Berda River
   5.4. Berdyansk Peninsula and Berdyanski Bay

6. Donetsk oblast:
   6.1. Belosarayskaya Peninsula and Belosarayski Bay
   6.2. Krivaya Peninsula and Krivoy Bay
Zones of ecological risk defined for coastal region of Ukraine
Sustainable businesses defined for zones of ecological risk in coastal region of Ukraine:

- Organic farming with the emphasis on irrigated agriculture
- Organic aquaculture with the emphasis on cultivation of endemic estuarial species
- Ecological tourism
- Sport hunting and fishing
- Yachting, surfing and boating
- Recreational activity with emphasis on sea and climatic resorts
- Recreational infrastructure: hotels, motels, parking etc.
- Drinking water production and supply
- Public transportation in resort areas
- Traditional using of natural resources within existing estuarial ecosystems